



Cheese in a Suck: Exploring History, Production Area and Production Process of a Typical Herzegovinian Product

SLAVICA SAMARDZIC*

Ministry of Agriculture, Forestry and Water Management of Republic of Srpska, Banja Luka, Bosnia and Herzegovina

Email: slavica92000@yahoo.com

HAMID EL BILALI

Mediterranean Agronomic Institute of Bari (CIHEAM-MAIB), Valenzano, Bari, Italy

SABAHUDIN BAJRAMOVIC

Faculty of Agriculture and Food Sciences, University of Sarajevo, Bosnia and Herzegovina

VERA KANLIC

Ministry of Agriculture, Forestry and Water Management of Republic of Srpska, Banja Luka, Bosnia and Herzegovina

ALEKSANDAR OSTOJIC

University of Banja Luka, Agricultural Faculty, Banja Luka, 78000, Bosnia and Herzegovina

SINISA BERJAN

University of East Sarajevo, East Sarajevo, 71123, Republic of Srpska, Bosnia and Herzegovina

ANA SAVKOVIC

Business Economics Academy, Cacak, 32000, Serbia

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Abstract Traditional and typical products have gained during the few last decades an important role in strategies for the development of remote rural regions. Herzegovina region is widely recognized and well-known for a unique gastronomic product; cheese in a suck. Uniqueness of this product derives from one phase of the production process - the ripening phase. The cheese ripens in sheep skin bags. Justification for choosing skin bag as a container for ripening and keeping cheese lies in history. The present research was carried out as the legal protection of a product with a Geographical Indication requires proofs of the historical existence of that product on a certain territory as well as the description of production technology and the mapping of the geographical area where product is made. The paper is based on an extended secondary data analysis and a field survey. Field research was carried out in 2011 using semi-structured interviews with a sample of 35 producer households - with a particular focus on women and the elderly - in the territory of Herzegovina. A checklist dealing mainly with the product history, the production area and the production technology and process of this typical Herzegovinian product was prepared for semi-structured interviews. Obtained results have proved that cheese in a suck has a long history and dates back to the 14th century in Herzegovina region. Usage of sheep skin bag as a packing material during the ripening process is a unique method itself. Cheese in a suck is a typical product connected with Dinara mountains in Herzegovina. Protection of cheese in suck will foster its contribution to the development of Herzegovinian rural areas.

Keywords cheese in a suck, history, production method, Herzegovina

INTRODUCTION

Among the leading trumps of the development of rural areas during the few last decades stand out high quality products that have age-lasting production history in a certain region. Such products have become a part of identity and cultural heritage of territories of origin. Probably the most famous gastronomic product of Herzegovina territory is cheese in a suck. In 2006 this cheese was inserted in a list of Presidia, products with unique characteristics, promoted by Slow Food.

With the reform of the Common Agricultural Policy (CAP) in 1992 and the introduction of rural development pillar, has been developed for the first time a clear framework and systematic approach for local and traditional products valorization. In parallel with the establishment of legal framework, has been developed academic literature on this topic. As a result of that typical products are no more seen only like foodstuff but, as Giovannucci et al. (2009) state, as a “*particularly interesting model for development*”. Some countries have approached very seriously the model of rural areas development based on typical products valorization. This is particularly the case in countries such as Italy, France and Spain.

According to the World Intellectual Property Organisation (WIPO, 2010), a geographical indication (GI) is a sign used on goods that have a specific geographical origin and possess qualities, reputation or characteristics that are essentially attributable to that origin. When GIs are legally registered, they take such forms as Appellation of Origin (AO), Protected Designation of Origin (PDO) and Protected Geographical Indications (PGI) (Belletti et al., 2011).

Products deriving from a limited geographical area undoubtedly contribute to increasing the quality of life, of both producers and consumers. The introduction of an institutional system of protection of Geographical Indications (GI) and valorization of systems in which they exist contribute to faster and sustainable development of rural areas (Bramley, 2011).

Not any product can be considered as a typical one. Marescoti (in Brunori et al., 2006) identified four elements for defining typicality: embedded specific local resources; history and tradition of production; presence of local collective know-how; and a defined geographical area.

From these guidelines it is clear how much is important to collect all historical proofs about existence of some product on a certain territory. Also, it is of crucial importance to justify the reasons for the use of a specific local resource like sheep skin bag in the case of Herzegovinian cheese in a suck. Any product which pretends bearing a legal sign or label of known and protected geographical origin, or to be a Presidium of Slow Food, should comply with some criteria such as: to possess a distinctive quality that is defined by local practices and traditions; to be linked to the memory and identity of a producing group; and to be linked to a specific area. These facts gave a base for carrying out the present research on the elements of typicality for cheese in a suck.

The research was carried out with the purpose to prepare Bosnian-Herzegovinian typical products to be protected with Geographical Indications. The paper aims at providing some insights about the history, production area and production process of cheese in a suck.

METHODOLOGY

In order to protect a product with the name of a geographical area it is necessary, among other requirements, to create a product specification that includes: a) name to be protected, b) description of the product including raw materials, c) definition of the geographical area, and d) description of the production method (Regulation EU No 1151/2012).

The paper is based on an extended secondary data analysis and a field research carried out in 2011 with the members of 35 farmer households - especially women and elders - in eight municipalities of Herzegovina region: Berkovici (7 households), Bileca (1), Konjic (4), Ljubinje (3), Ljubuski (1), Posušje (1), Prozor/Rama (5), and Nevesinje (13). Data were collected by carrying out semi-structured interviews focusing on production history, area of production and traditional production method. Herzegovina (22% of the country area) is the southern region of Bosnia and Herzegovina. It is in general accepted that Herzegovina region's borders are Croatia (southwest), Montenegro (east), the *Maglić* Mountain (northeast), and *Ivan planina* (north).

RESULTS AND DISCUSSION

Cheese in a suck belongs to the group of semi-hard cheeses. It is made from cow, sheep or goat non-pasteurized milk, or milk mixture of these species. Written proofs from the 14th century confirm its presence since then in Herzegovina territory. The main uniqueness feature of this cheese derives from one producing phase, ripening, that is performed in a special sheep skin bag.

History of Production

For centuries the livelihood of inhabitants of Dinara Mountains was mainly based on livestock rising. Nomads used to move with their herds of sheep, cows, horses and other livestock in Dinara Mountains for more than six months per year. Since some centuries ago there were no means of transport or good roads, the main shepherds' and their families' foodstuffs were milk and dairy products. However, even so they did not manage using the whole produced milk. That was a serious problem especially in hot summer months as they had no coolers and other appliances that they could have used to store milk for a long period. So they could only rely on their innovativeness and ingenuity to find a solution to this problem and to avoid losing milk, which represents one of few resources that they had.

It is commonly known since the earliest times that milk in a sheep skin coagulates by itself due to the action of existing ferments in sheep skin. It is assumed that people in ancient times wanted to use skin bag, not only for coagulation of milk, but also for keeping cheese for a longer period. Sheep skin proved to be a good utensil and was kept up to the present time. Thanks to that cheese in a suck has become a hallmark of Herzegovinian culinary heritage.

Existence of cheese in a suck in Herzegovina is evident in many written records, as well as through oral stories that have passed on through generations. Thus, Sarić (2009) in a study in the framework of "*Protection and valorization of agricultural products of interest for Herzegovina*" project states that there is written evidence of cheese production from the 14th century. According to the same author "*By the end of the 16th century Herzegovina donated cattle to Dubrovnik in unlimited quantities and up to 800 kg of cheese in a suck*". The same author further states: "*The earliest legal act in Turkish text for Branichevo province from 1487/8 listing the mandatory items that each household has to provide to the Bey states: one tent, three ropes, six halter, one cheese in a suck and one sheep....*". In the same text it is also stated: "*Cheese and cream are packed in sheep skin bags and with horses and donkeys brought to the Herzegovinian squares.*"

History bears secrets and gives answers about production technologies and processes chosen by communities at different times of their history. Scarce land resources, severe weather conditions, and ingenuity in subsistence options and strategies are just some of the many hypotheses that explain the emergence and survival of cheese production modes in Herzegovina as well as in the whole Dinaric. About the choice of keeping cheese ("Sir") into a skin bag, the Italian journalist Carlo Macchi (2006) wrote an amazing article entitled "*The Golden Fleece*". Here is a paragraph of the article: "*...I had also found answers to many "mythological" questions. I always wondered why the Argonauts were glad to risk their own lives searching for a golden mutton's skin, and now I know: they were looking for the "Sir" and not for the golden fleece. How much would a bunch of rough soldiers care for a simple, wrinkly (yet precious) skin? They were only looking for something to feast on, please their senses with, and thus feel closer to the gods...*".

Looking at the global level, similar technology for cheese ripening in sheep skin bags was observed only in Turkey specifically in Tulum cheese production area. However, as written evidence proves the presence of cheese in a suck in Herzegovina region before Ottomans empire advent in Balkans (Sarić, 2009), there is no doubt that cheese in a suck is a unique product of Dinara Mountains and as such is unique and inseparable from this geographical area.

Area of Production

Through history the area of production of cheese in a suck was linked to Dinara mountains, which stretches from Croatia through Bosnia and Herzegovina, Montenegro to Serbia. However, the

production of cheese in most of the areas where it was previously produced is almost entirely abandoned. It is now largely concentrated in specific Herzegovinian sites. As Sarić (2009) states: "The area of cheese production is the whole region of Herzegovina. This area stretches from the border with Montenegro to the east, to the area of Livno and Kupres to the west which are Livno cheese producing areas. To the south the production area borders with Croatia, while on the north side includes Nevesinje, Konjic, Prozor-Rama and Kupres".

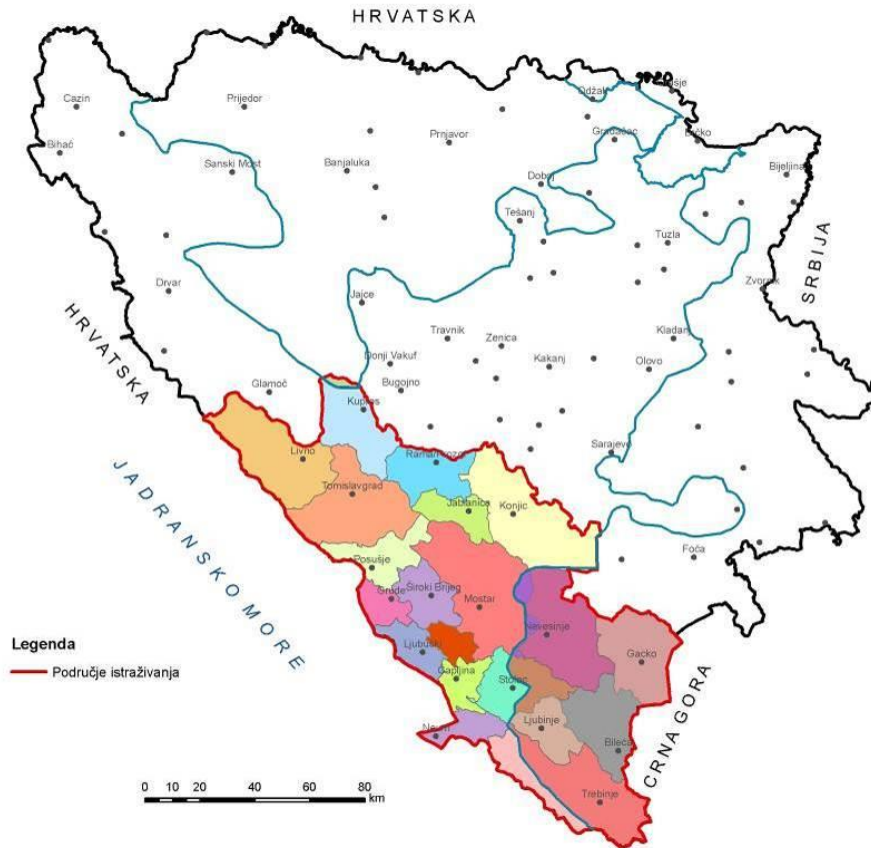







Fig. 1 Territory of production

Traditional Method of Production

The main steps of the traditional method for the production of cheese in a suck are the following: preparing sheep skin bag; curdling of milk; whey separation; stacking and salting cheese in the bag; and ripening and storage of cheese (Table 1).

Geographical Indication (GI) products have positive effects on social features of communities from which they derive (Belletti et al., 2011). By improving market access, GIs can lead to higher incomes. But GIs have a further potential income effect through the collective process of value creation (Barjolle and Sylvander, 2000; Barjolle and Salvadori, 2010). The economic benefits of geographical indications come mainly from differentiation (Belletti et al., 2011; Moschini et al, 2008). GI overcome the dimension of pure economic benefit for producers and expands the range of effects on consumers, rural areas, and to entire regions and countries (Bramley, 2011). It is widely articulated that protected GIs may contribute to rural development (cf. Van de Kop et al., 2006; Zografos, 2008). Nevertheless, GI laws cannot by themselves guarantee benefits for rural development (Hughes, 2009; Belletti et al., 2011). These effects depend strongly on the quality of the supply chain governance (Hughes, 2009).

Table 1 Traditional production process

Production step	Description	Illustrations
Preparation of sheep skin bag	<p>As the sheep skin bag is a basic element of uniqueness and typicality of cheese in suck, its proper preparation is of extreme importance for ripen cheese quality. Preparation of the suck is the phase that requires special craftsmanship and attention. After slaughtering sheep, suck is washed together with wool. Thereafter, the wool is shaved and the suck turned so that the inner part goes outside.</p> <p>With strong rope should be shut all holes on the suck, and then the suck is inflated and hanged and smoked for several days. When the suck overnights in smoke, without changing its shape, it means that it is not anywhere perforated and can be safely used for cheese ripening and storage. When the outside part of the suck gets smoked, then holes on the suck should be untied to let smoke get into inner parts. Smoked suck has to be washed properly, then inflated again to the point when easy handling during cheese inserting is possible (usually 1 to 2 days).</p>	 <p><i>Prepared sheep skin bag</i></p>
Curdling of milk	<p>Immediately after milking, milk should be filtrated through a thick woven cotton cloth and warmed to 35°C. According to producers from Nevesinje, in early cow lactation 10 liters of milk are needed to obtain 1 kg of cheese, while at the end of the lactation period only 5-6 liters are required.</p> <p>Rennet should be added to the filtrated and warm milk. The length of the curdling phase depends of strength of rennet and milk temperature. It can last between 1 and 1.5 hours. During curdling it is necessary to repeatedly stir the cheese mass. Curdling is complete when whey reaches yellow-green color and cheese begins to settle on the bottom of the pan.</p>	 <p><i>Curdling of milk</i></p>
Whey separation	<p>When cheese is settled on the bottom of the pan, the portion of the whey floating on the surface should be drained out. The remaining mass of cheese and whey should be transferred to another pot on whose surface has been previously put a cotton cloth. Then the edges of the cotton tissue have to be taken and gently squeezed by hands to remove as much whey as possible.</p> <p>After that, the wrapped and shaped cheese block has to be placed under the press e.g. large stone. The cheese remains under the stone for about 12 hours. Pressing should be done properly, as if in cheese pastry remains whey, it may create holes and give bitter, unpleasant taste to the cheese.</p>	 <p><i>Separation of whey</i></p>
Stacking and salting of cheese in the bag	<p>Just before inserting cheese in the bag, cheese blocks should be broken by hands into smaller pieces and salted. To 30 kg cheese should be added 1 kg salt. Once salted, cheese should be left to overnight in order to drain out the rest of whey.</p> <p>Then, the salted and dry small pieces of cheese should be inserted in the skin bag through the "neck" hole of the suck, while all other openings should be closed. Several times during the insertion into the bag, cheese should be pressed with wooden beater or by hand, to avoid any possible formation of air rooms in the suck. When the suck is filled up, the neck should be tied and the suck transferred to the ripening room.</p>	 <p><i>Inserting cheese pieces into the suck</i></p>
Ripening and storage of cheese	<p>Cheese should be stored in dark rooms, specifically designated for this purpose, where the temperature is between 12°C and 15°C and humidity between 60% and 70%. The sucks are placed on a wooden plank in such a way that they do not touch each other during ripening. Sucks should be turned daily at the beginning of ripening and then less frequently. The ripening takes a minimum of two and a maximum of eight months. During the summer months it is necessary to maintain a consistent room temperature (ideally 12-15°C).</p>	 <p><i>Ripening of cheese</i></p>
Last stage	<p>At the end of the production process and after the removal of skins, the dry cheese takes the form of lumps of various sizes with a diameter not exceeding 10 cm. Cheese paste is white to yellowish.</p>	

CONCLUSION

Traditional and typical products are the result of complex production systems strictly interrelated with many territorial dimensions. Geographical indications have positive effects on producers and the wider regions of origin. The legal protection of GI products is often conceived as a lever for activating local development dynamics and defending territorial production systems with a high degree of site specificity. However, achieving these dynamics is not a simple process and requires concerted efforts.

Revival and valorization of typical products ensures not only their legal recognition and protection and their economic development but is also a very promising model for the development of the region of origin. At the same time, it provides good benefits to different segments of communities, not just producers. Development advantages range from the provision of new socio-cultural values to the more tangible economic benefits (employment growth, higher incomes). In addition to direct benefits, there is a number of indirect ones (e.g. tourism).

The uniqueness of cheese in a suck makes this product very appealing not only as a foodstuff, but also as cultural heritage admired by all visitors of Herzegovina. The potential that this cheese bears should be utilized as a driver for fostering rural development in Herzegovina region.

One of the practical results of this research is drafting specifications for the production of the authentic traditional Herzegovinian cheese in a suck. This is a very important document for members of the Association of producers. Also, these specifications are intended to be used as a document for application to a protected geographical indication for cheese in a suck.

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